

REMARKS

In view of the above amendments and the following remarks, reconsideration and further examination are requested.

By this amendment, claims 12-21 and 25-27 have been amended. Claims 13-18 were previously canceled. Thus, claims 19-27 remain pending. Support for the new claim recitations can be found at least at: Fig. 62(b); column 48, lines 6-30; Fig. 179; Fig. 174; column 60, lines 3-5; and column 59, lines 49-64. If the Examiner requires further supporting passages, she is invited to contact the undersigned by telephone.

A substitute specification is filed herewith to make amendments to the specification. Also, proposed drawing amendments and new formal drawings incorporating the proposed drawing amendments are filed herewith. No new matter has been added.

Applicants wish to thank the Examiner for her time and consideration during the personal interview of July 3, 2003. The substance of the arguments presented to the Examiner during the interview are detailed below in response to the rejections set forth in the outstanding Office Action.

Claims 19, 20, 25, and 26 were rejected under 35 U.S.C. § 102(e) as being anticipated by Jonnalagadda. This rejection is traversed.

The claims have been amended to recite that the data stream includes audio and video information and that the data stream is mapped to an n-level digital signal.

Jonnalagadda discloses a system in which a portion of an analog NTSC signal is removed and a digital audio signal is inserted into the analog NTSC signal in place of the removed portion. See Abstract and the paragraph spanning columns 1 and 2, for example. The analog NTSC signal, with the inserted digital audio, is then transmitted. Thus, Jonnalagadda does not disclose or suggest that a data stream including both audio and video information is mapped to a digital mapped signal, or conversely that a digital signal is demapped to the data stream including the audio and video information as recited in the present claims. Rather, as a result of invention of Jonnalagadda, the signal has a digital audio and analog video, and is not a data stream including audio and video information mapped to an n-level digital signal.

Also, each of the independent claims recites a filter having a VSB characteristic which covers a frequency band including a carrier frequency. The filter of Jonnalagadda does not have a VSB characteristic which covers a frequency band including the carrier frequency. See Fig. 4D of Jonnalagadda, which shows that the VSB characteristic (VSB filter roll off) covers a frequency band, shown with hatching, that does not include the carrier frequency f_{pix} . See column 5, lines 22-24, which describe the carrier frequency f_{pix} .

In view of the above reasons, claims 19-27 are not anticipated by Jonnalagadda, or obvious in view of Jonnalagadda.

Claims 21-24, and 27 were rejected under 35 U.S.C. § 102(b) as being anticipated by Haskell. This rejection is traversed.

The Examiner asserts that the filter 55 in Fig. 8 of Haskell meets the claimed filter. However, the filter 55 is clearly labeled, and schematically illustrated, as a VSB Equalizing Filter. Note the shape of the shape of the filter characteristic illustrated in box 55 of Fig. 8 of Haskell, which provides suppression, i.e., equalization, of the input signal to compensate for unwanted aspects of the signal added by the VSB process. This filter 55 of Haskell is not disclosed as having a VSB characteristic, which covers a frequency band including a carrier frequency and/or a roll-off characteristic, which covers a frequency band not including the carrier frequency, nor is the filter employed to produce a VSB modulated signal or an n-level digital mapped signal as recited in the pending claims.

Because of the above reasons, claims 19-27 are not anticipated by Haskell, or obvious in view of Haskell.

In view of the above amendments and remarks, it is submitted that the present application is in condition for allowance. The Examiner is invited to contact the undersigned attorney by telephone to resolve any remaining issues.

Respectfully submitted,

Mitsuaki OSHIMA et al.

By: 

Jeffrey R. Filipek

Registration No. 41,471

Attorney for Patentees

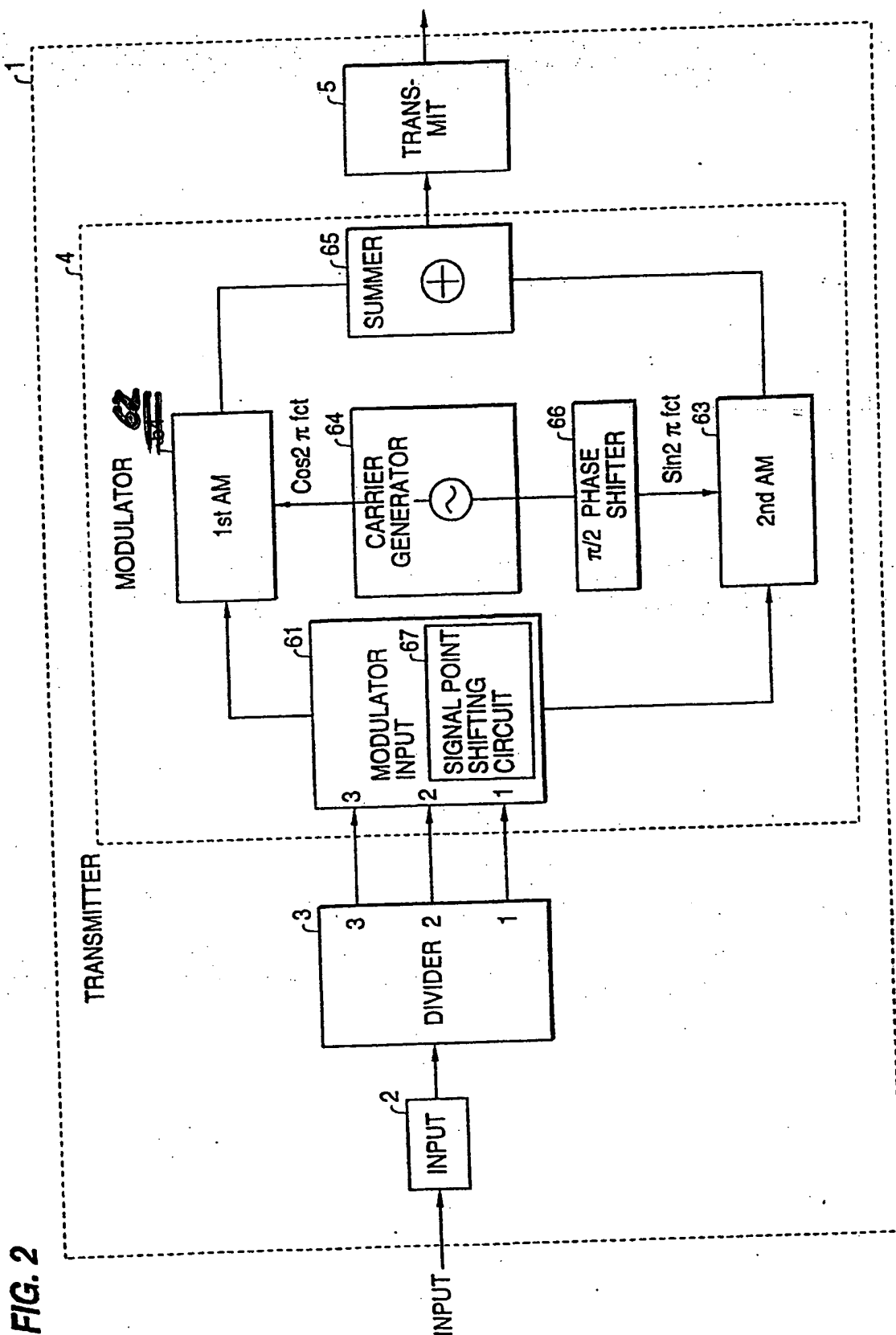
JRF/jf
Washington, D.C. 20006-1021
Telephone (202) 721-8200
Facsimile (202) 721-8250
August 1, 2003



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FIG. 10

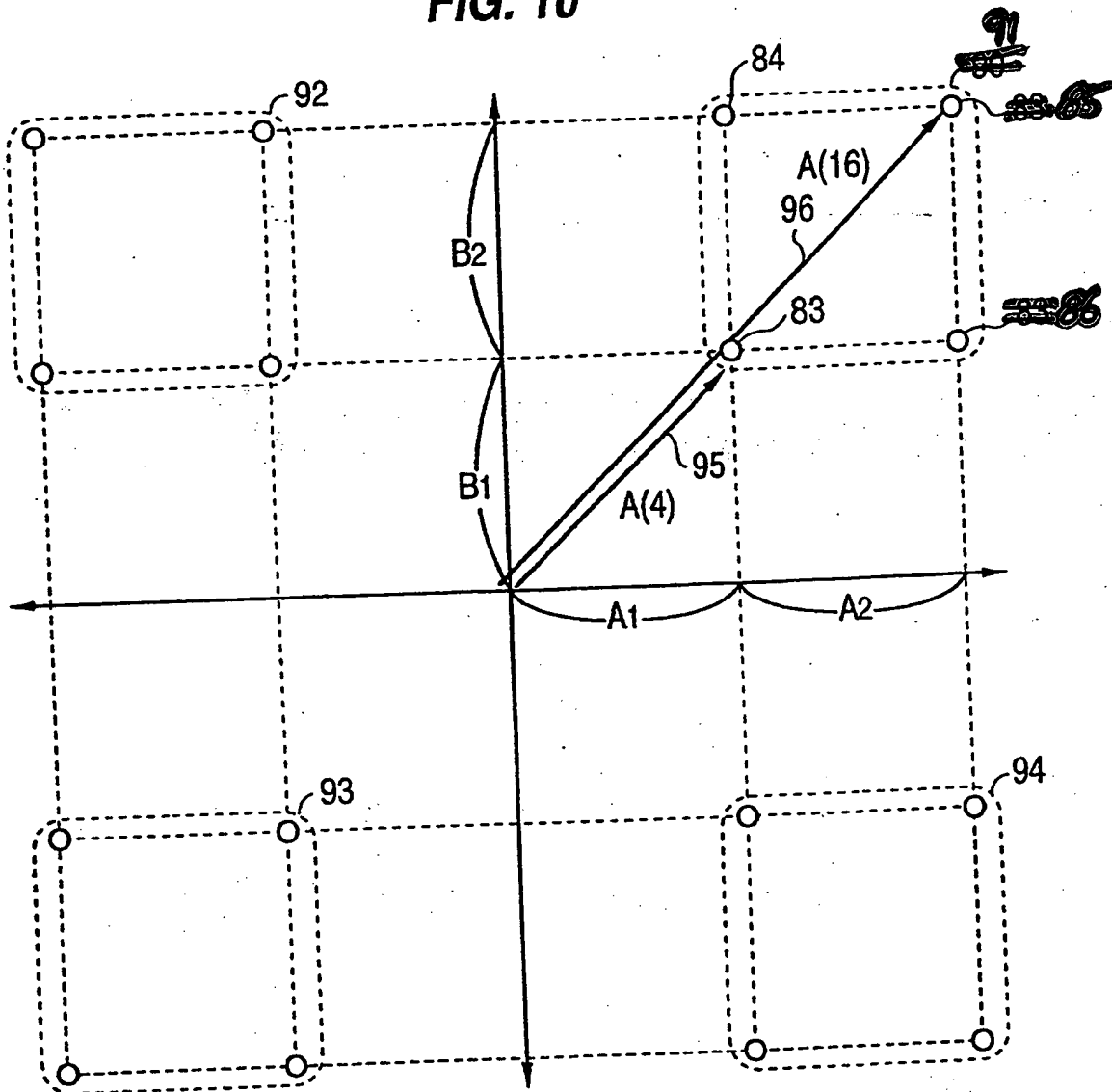
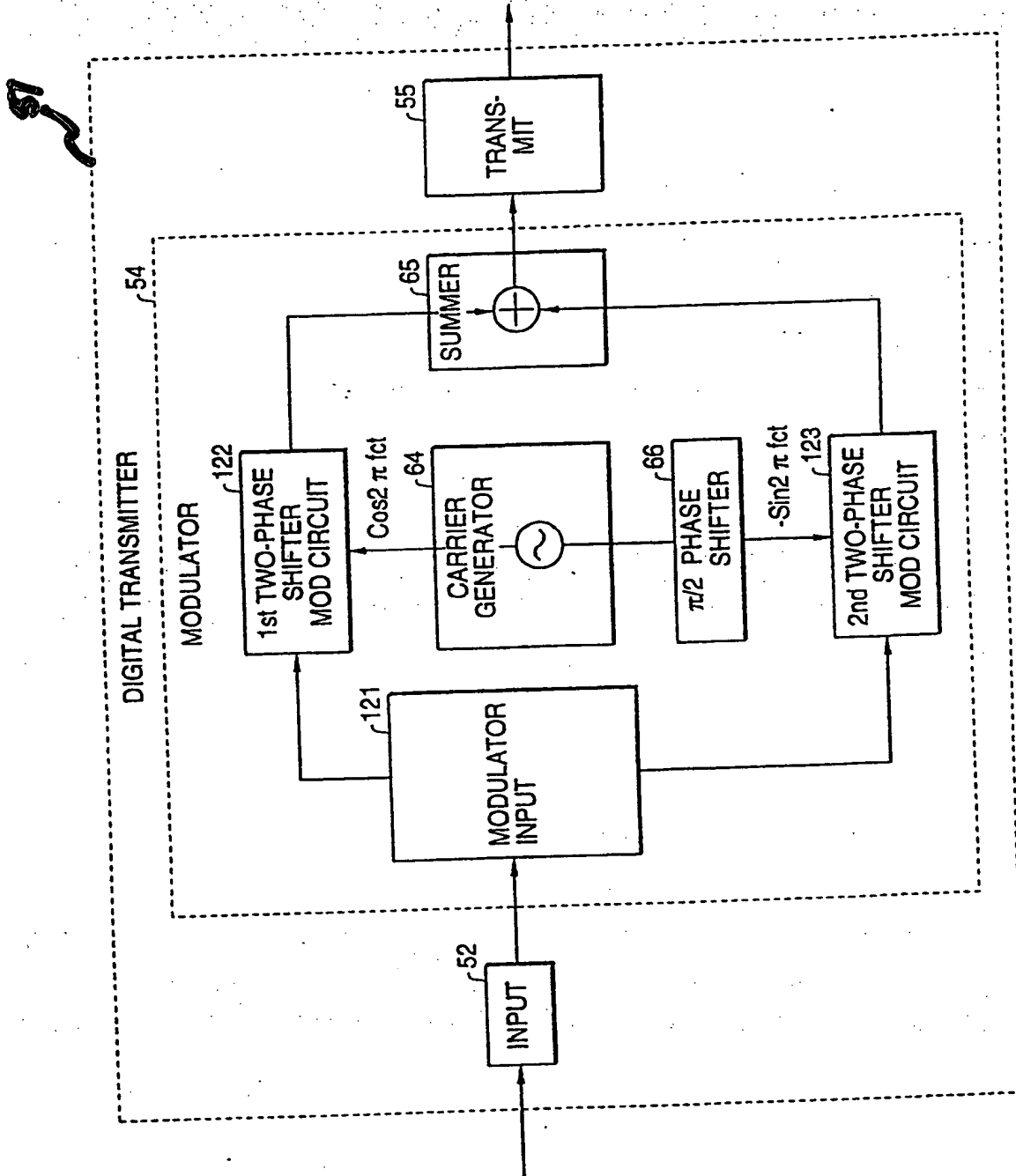


FIG. 17



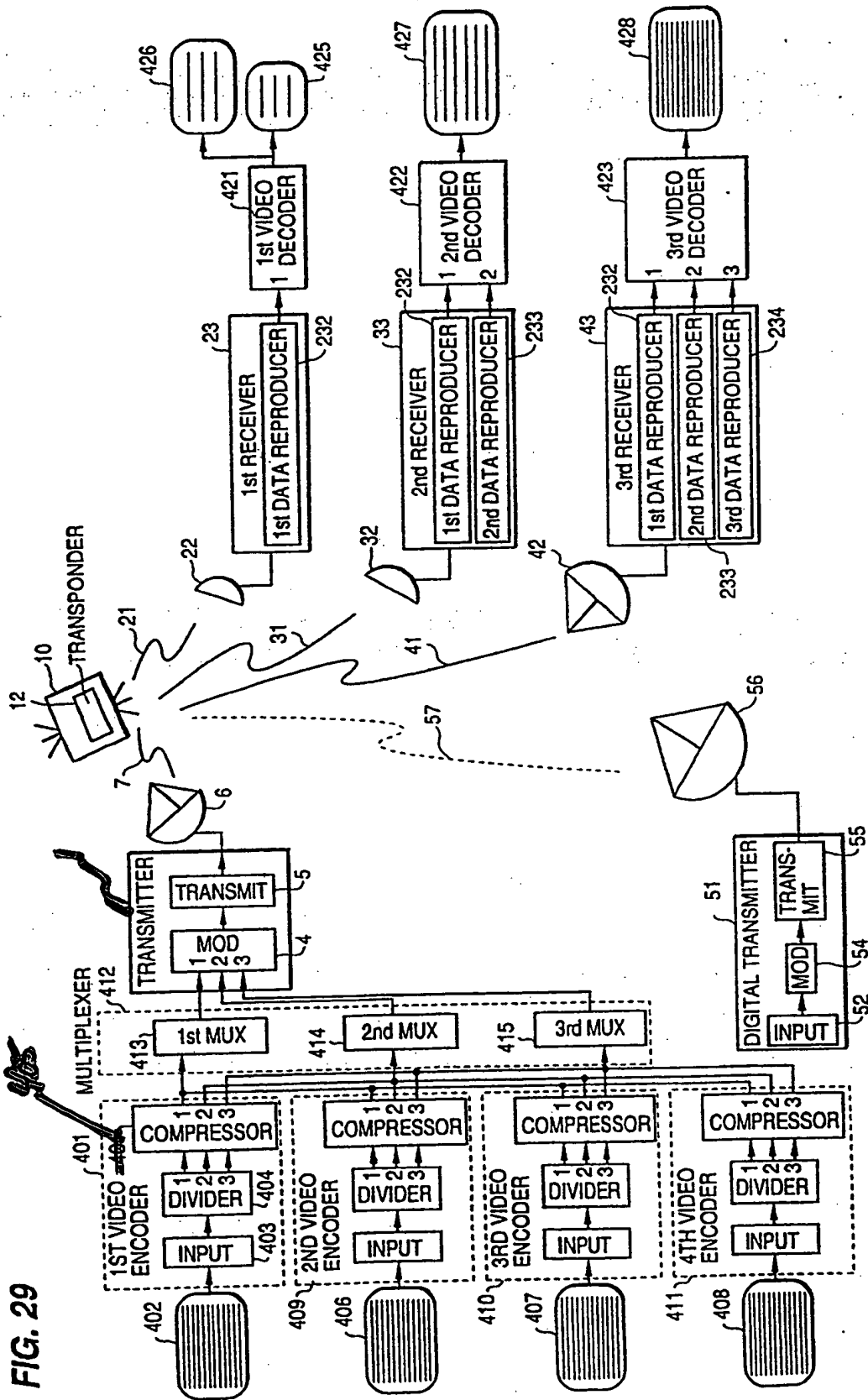




FIG. 48

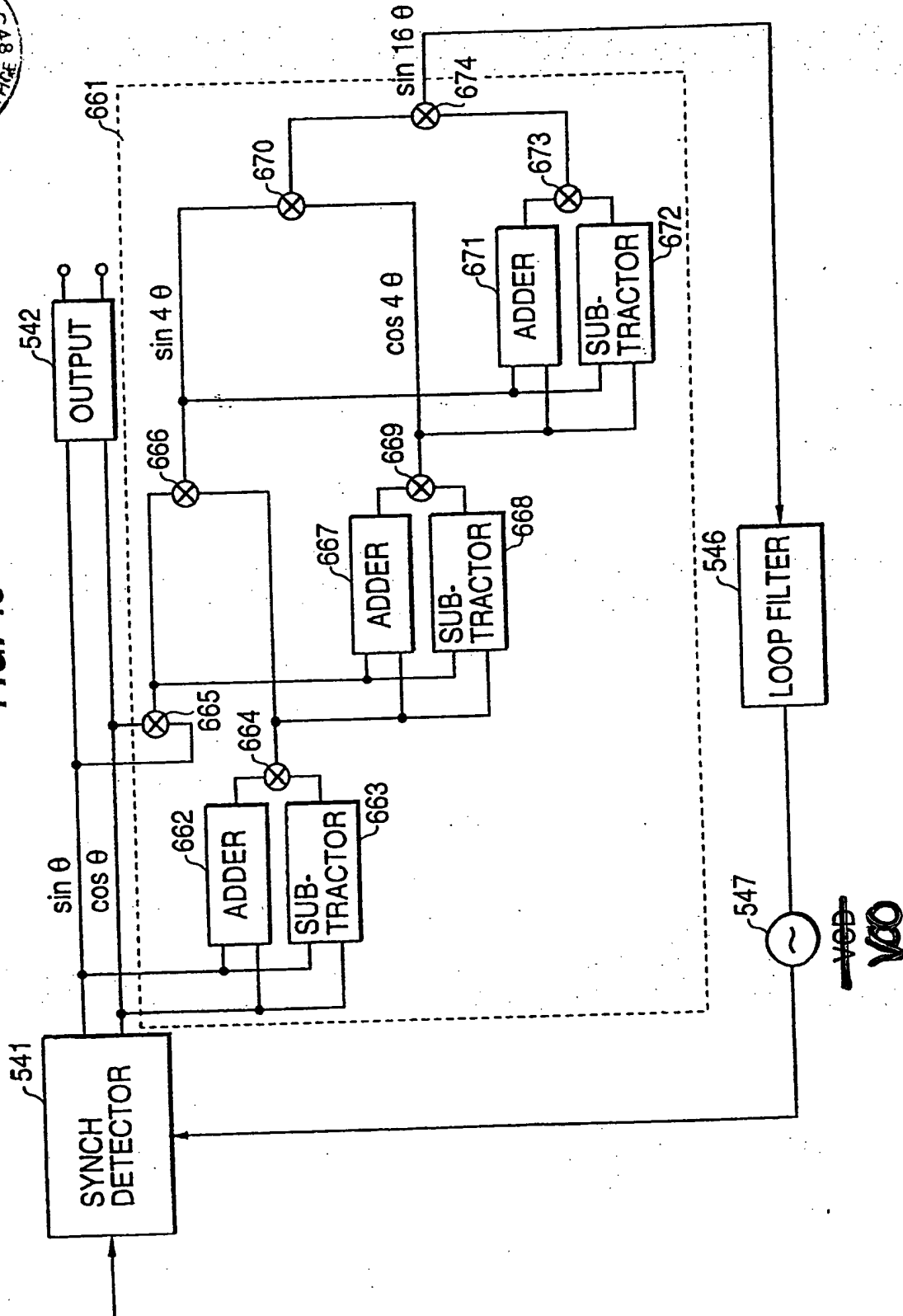




FIG. 65

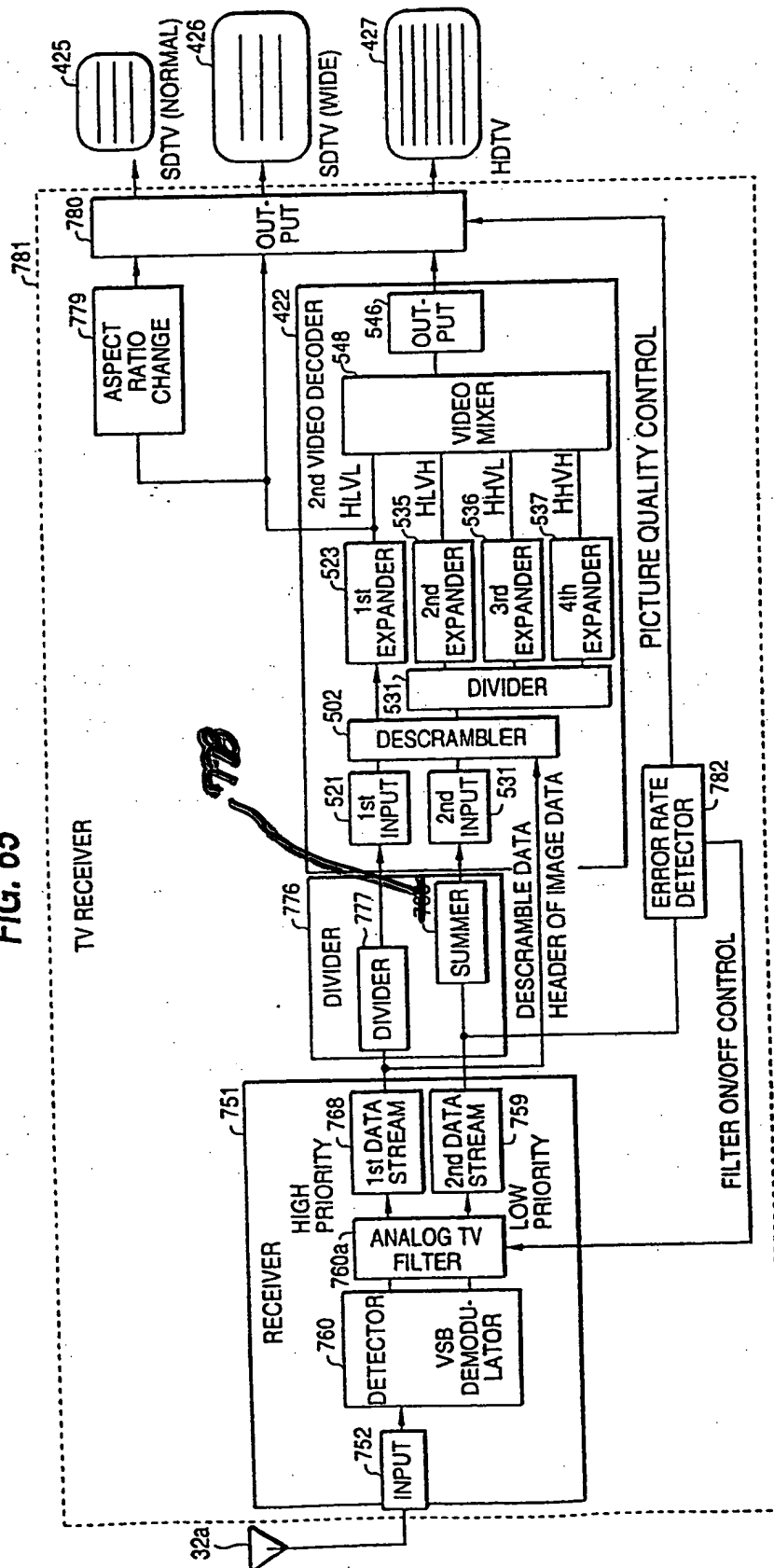




FIG. 67

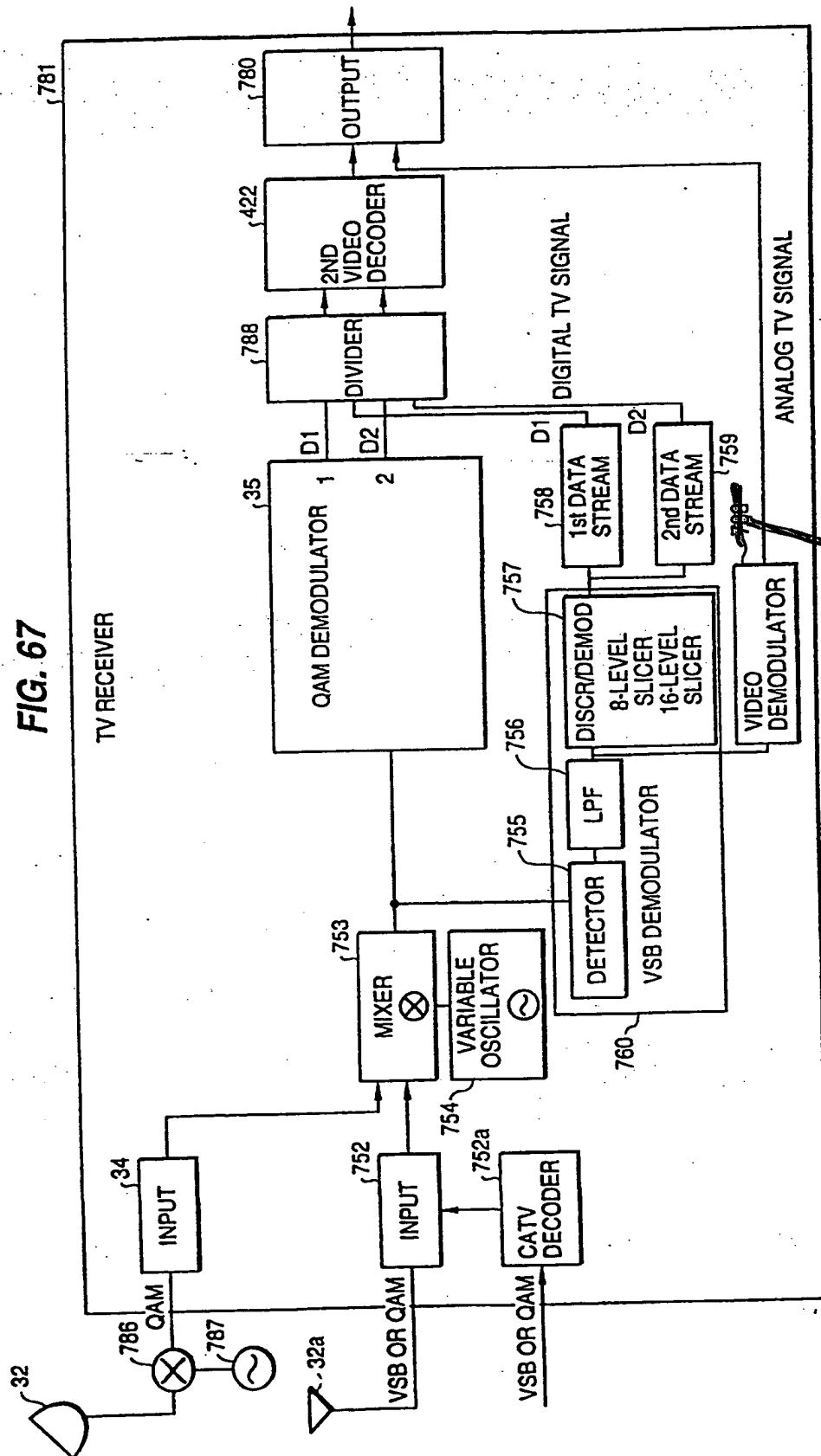


FIG. 93

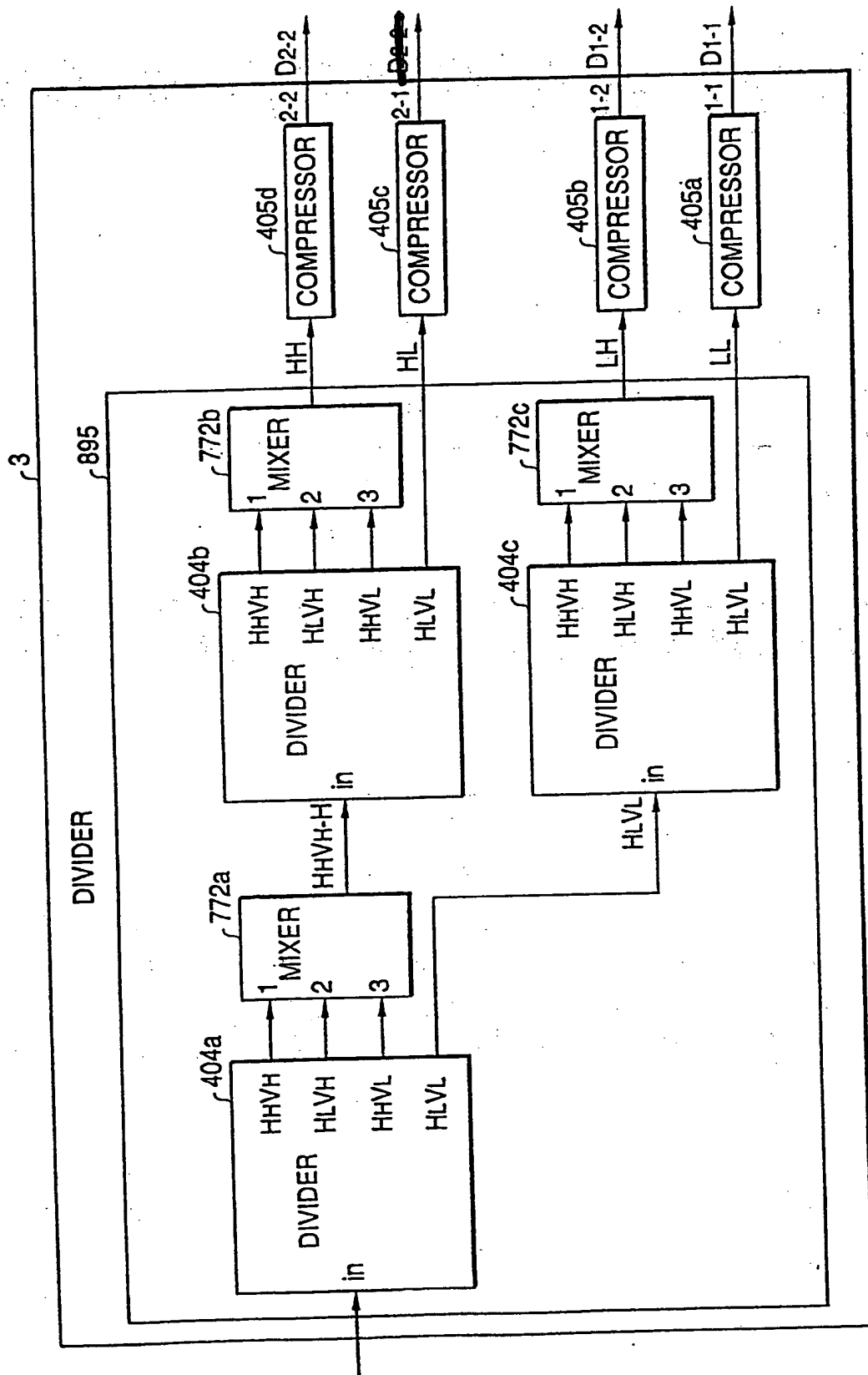
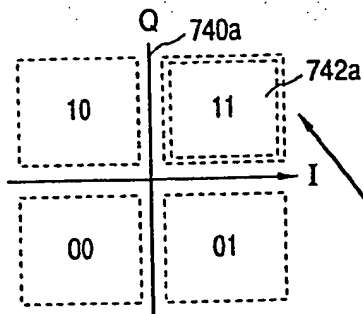
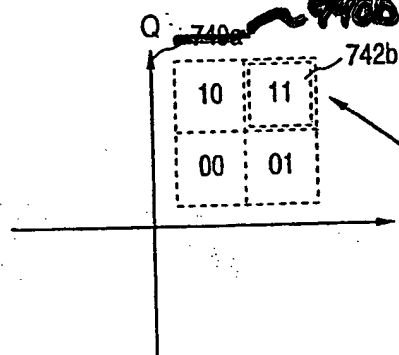


FIG. 112

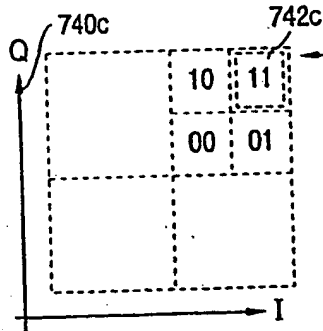
SUBCHANNEL-1 (SRQAM:D1 = 2bit)



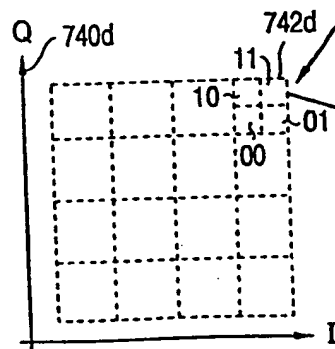
SUBCHANNEL-2 (16-SRQAM:D2 = 2bit)



SUBCHANNEL-3 (64-SRQAM:D3 = 2bit)



SUBCHANNEL-4 (256-SRQAM:D4 = 2bit)



CODE WORD-1

CODE WORD-2

CODE WORD-3

CODE WORD-4

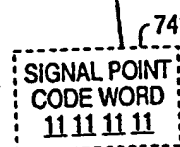
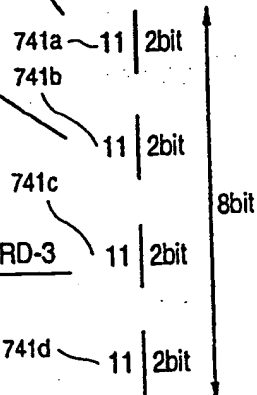
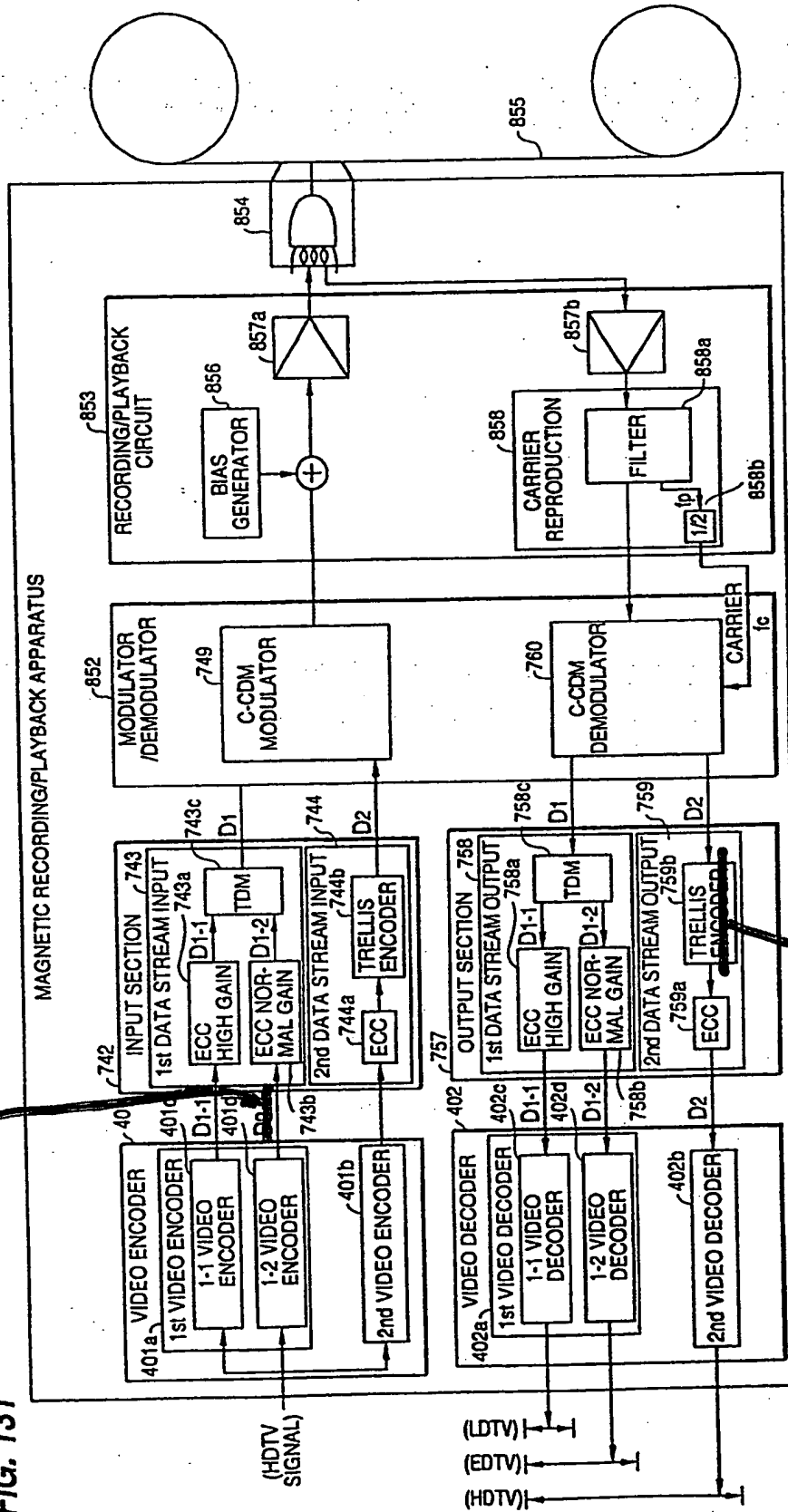




FIG. 131



DEER

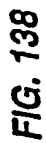




FIG. 144

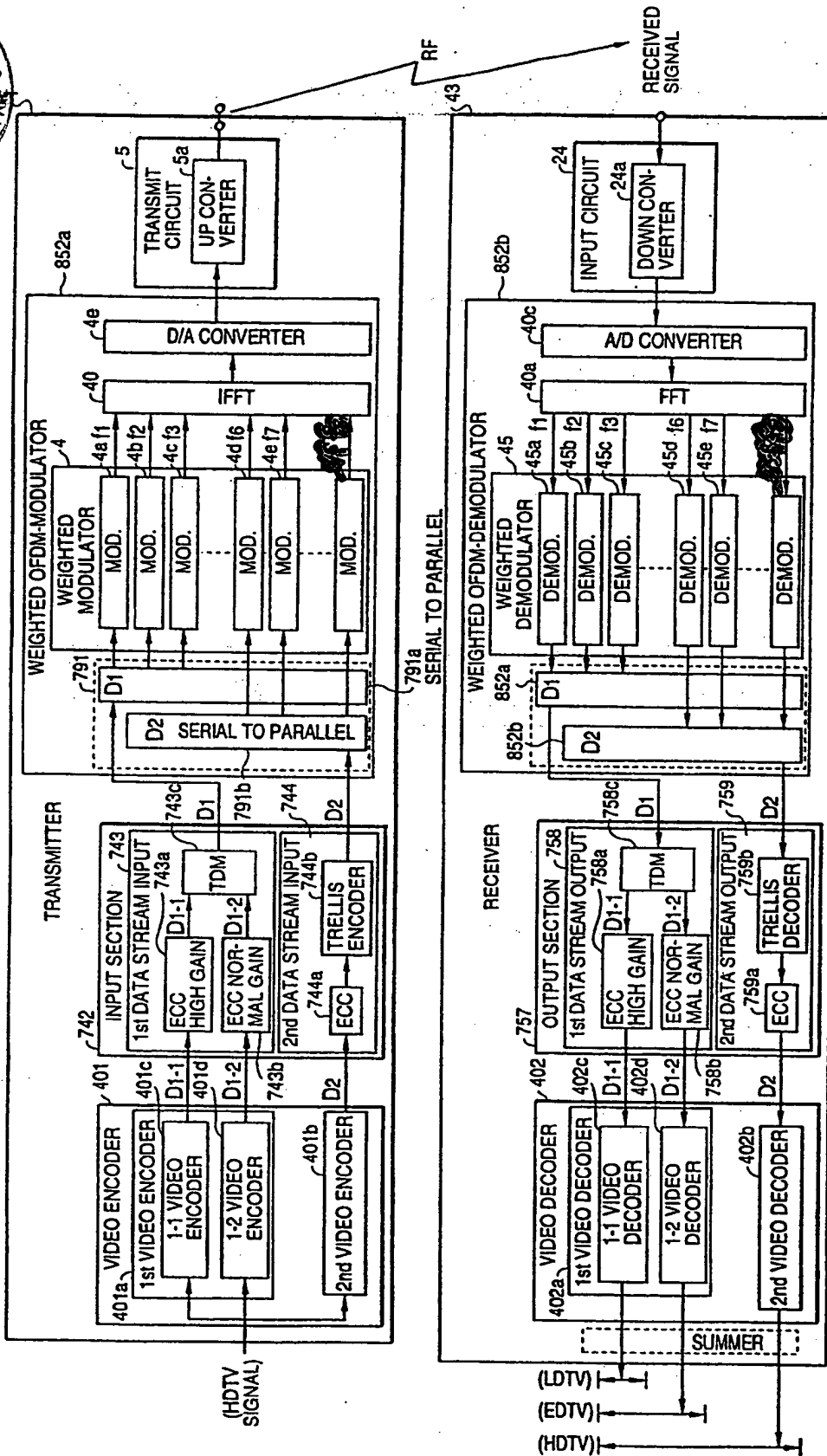


FIG. 169 (Amended)

COMPARISON OF REDUNDANCY

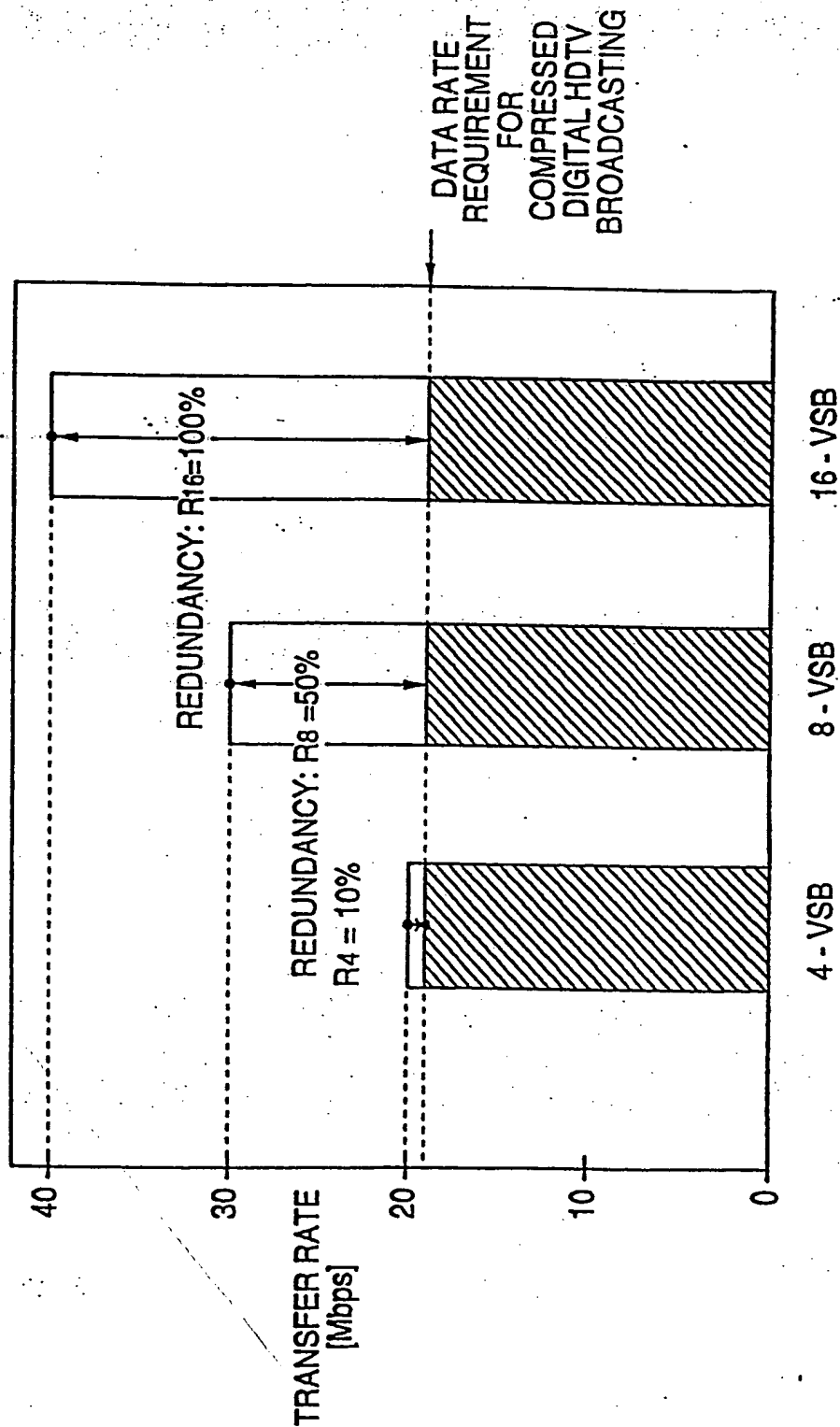




FIG. 169

COMPARISON OF REDUNDANCY

